

DOCUMENT RESUME

ED 241 878

CG 017 356

AUTHOR Wurf, Elissa; Markus, Hazel
TITLE Cognitive Consequences of the Negative Self.
PUB DATE Aug 83
NOTE 26p.; Paper presented at the Annual Convention of the American Psychological Association (91st, Anaheim, CA, August 26-30, 1983).
PUB TYPE Reports - Research/Technical (143) -- Speeches/Conference Papers (150)
EDRS PRICE MF01/PC02 Plus Postage.
DESCRIPTORS *Cognitive Processes; College Students; *Congruence (Psychology); Evaluative Thinking; Higher Education; *Negative Attitudes; Personality Traits; *Schemata (Cognition); *Self Concept
IDENTIFIERS Independent Behavior; Shyness

ABSTRACT

Research on self-concept has usually focused on neutral or positive personality characteristics. To determine if negative beliefs about the self have schematic properties, 55 college students, assigned to one of four groups (shy schematics, shy aschematics, independent schematics, independent aschematics), based on a prescreening self-rating on trait adjectives, participated in two studies. In the first study, subjects rated themselves on three tasks (trait adjectives, behaviors, and the prescreening scale). They also rated their confidence in their responses. In the second study, subjects rated the accuracy of false feedback of others' perceptions of their self-schemas, after participating in a small group problem solving discussion. An analysis of the results from both studies showed that schematic subjects, both shy and independent, judged a greater proportion of schema-congruent words as self-descriptive, made these judgments more quickly, evaluated schema-congruent behavior as relatively probable, and were more resistant to schema-incongruent feedback, regardless of the valence of the schema, than were aschematic subjects. Shy schematics had well formulated thoughts and feelings about themselves in negatively valued domains, were particularly sensitive to negative information, and processed that information quite efficiently. The findings suggest that people do not always ignore or systematically distort negative self-relevant information. (Author/BL)

* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *

ED241878

Cognitive Consequences of the Negative Self

Elissa Wurf and Hazel Markus

University of Michigan

- Paper presented at the American
- Psychological Association convention,
- Anaheim, CA August 1983

Correspondence should be addressed to either author at the
Institute for Social Research, University of Michigan, Ann
Arbor, Mich. 48106

U.S. DEPARTMENT OF EDUCATION
NATIONAL INSTITUTE OF EDUCATION
EDUCATIONAL RESOURCES INFORMATION
CENTER (ERIC)

* This document has been reproduced as
received from the person or organization
originating it.
Minor changes have been made to improve
reproduction quality.

• Points of view or opinions stated in this docu-
ment do not necessarily represent official NIE
position or policy.

"PERMISSION TO REPRODUCE THIS
MATERIAL HAS BEEN GRANTED BY

Elissa Wurf

TO THE EDUCATIONAL RESOURCES
INFORMATION CENTER (ERIC)."

CG 017356

Cognitive Consequences of the Negative Self

Elissa Wurf and Hazel Markus

University of Michigan

This study was designed to explore the negative self-concept. The self-concept was defined as a set of knowledge structures which summarizes and facilitates processing of an individual's information about the self in a particular domain (self-schemas). Two experiments were conducted to investigate how information processing is affected when this self-knowledge is evaluated negatively. Subjects with self-schemas about shyness (a negative self-schema) and subjects with self-schemas about independence (a positive self-schema) were compared with those without such schemas (aschematics). Schematic subjects, (both shy and independent) in comparison to Aschematics, judged a greater proportion of schema-congruent words as self-descriptive, made these judgments more quickly, evaluated schema-congruent behavior as relatively probable, and were more resistant to schema-incongruent feedback, regardless of the valence of the schema. Shy Schematics, however, seemed particularly well-defined with respect to what they were not. Although most people are greatly invested in seeing themselves in a positive light, this study suggests that they will not always ignore or systematically distort

negative self-relevant information. Instead, when individuals have achieved a clear understanding about some negative quality of their behavior, they may be particularly sensitive to relevant negative information and process it quite efficiently.

Cognitive Consequences of the Negative Self

People have a wide variety of beliefs about their own characteristics. One's self-concept might include, for example, a view of one's self as short, funny, intelligent, and lazy. Although most of these self-attributed characteristics are positive or can be given a positive cast, some significant number of them may be negative.

Most research on the self-concept has focused on characteristics that are neutral or positive. For example, research on self-schemas (Markus, 1977; Kuiper & Derry, 1981; Rogers, 1981) has investigated the domains of independence, creativity, and masculinity. This research has demonstrated that people who possess a self-schema ("cognitive generalizations about the self, derived from past experience, that organize and guide the processing of self-related information contained in the individual's social experiences," Markus, 1977, p. 64) in a domain process domain-relevant information more efficiently and consistently than do individuals who lack a schema in the domain (aschematics).

The purpose of the present study is to examine beliefs about the self that are negative to determine if these have schematic properties. This will be accomplished by comparing the cognitive consequences of the positive self with those for the negative self. Two competing hypotheses

are to be evaluated. First, it may be that well-articulated beliefs about the self that are negative function exactly as do well-articulated beliefs about the self that are positive. If this is the case, they will enable the individual to be particularly sensitive to relevant information and will expedite self-relevant information processing. Earlier studies (Markus, 1977; Markus, Crane, Bernstein, & Siladi, 1982; Markus, Hamill, & Sentis, 1982) have shown that self-schemas in positive domains allow a person to identify certain behavioral regularities, to say which behavioral characteristics are self-descriptive and which are not, and to do so quickly, confidently, and consistently. Negative self-schemas may produce a similar pattern of results.

Holding beliefs about the self that are negative, however, is quite likely to produce dissonance: the person sees the self as engaging in behavior that is negatively valued but at the same time prefers not to display this type of behavior. The conflict associated with holding negatively evaluated self-relevant beliefs may well systematically interfere with the processing of negative information. As a consequence, the pattern of results obtained for negative self-schemas may be quite different than that obtained for the positive self-schemas.

To test these hypotheses, a two-part investigation was conducted. Part one explored how negatively evaluated self-schemas influence information processing; part two looked

more closely at the conflict generated by such negative self-schemas.

Study One

Subjects

Students in introductory psychology classes completed a questionnaire, rating themselves on several trait adjectives. Subjects were selected on the basis of their scores in one of two domains, independence and shyness. To select subjects, scores on six scales were added to create an index for each domain. The independence index consisted of scores on the three scales independent-dependent, leader-follower, and individualist-conformist, plus the rated importance of each scale. The shyness index consisted of scores on the scales shy-unshy, timid-bold, and reserved-lively, plus the rated importance of these dimensions. A population distribution of the thousand prescreening subjects was constructed for each index. Subjects were selected as Independent Schematics if they fell into the top 15% of the independence index distribution; and subjects were selected as Independent Aschematics if they fell into the middle 40% to 60% of the distribution. Shy Schematics were selected if they fell into the top 10% of the Shyness distribution; Shy Aschematics were those subjects who fell into the middle 35% to 65% of the distribution (selection criteria differ for the independence and shyness distributions because of the difference in the shapes of the two distributions).

The final subject population consisted of 55 students: 22 Shy Schematics, 13 Shy Aschematics, 17 Independent Schematics, and 16 Independent Aschematics (numbers do not sum to 55 because some subjects fell into both a shyness category and an independence category).

Subjects participated in both study 1 and study 2, though they were not made aware of the connection between the studies until debriefing.

Procedure

Subjects were asked to perform three tasks. In task one, a computer-controlled projector presented subjects with 120 trait adjectives from several personality dimensions, including Shy-Outgoing and Independent-Dependent. Subjects were told to press a me button if a trait was self-descriptive and a not me button if it was not. Subjects also indicated how confident they were about each me/not me decision. In task two, subjects were presented with short behavioral descriptions corresponding to the domains examined in this study (e.g., "At a large party, you sit off to one side and hope that others will approach you," for Shyness). Subjects rated the probability, from 0 to 100, that they would behave in such a way. Finally, subjects were asked to re-rate themselves on some of the original prescreening scales and to rate how good or bad they felt about their rating. A self-esteem scale was also included with the scales.

Results and Discussion

Manipulation Check

When subjects re-rated themselves on the prescreening scales, once again, Independent Schematics rated themselves as more independent than did Aschematics ($M_s = 1.82$ vs 3.81 , $t(31) = -2.78$, $p < .01$), while Shy Schematics rated themselves as more shy than did Aschematics ($M_s = 3.04$ vs 6.85 , $t(33) = -4.86$, $p < .0001$).

When asked to rate how they felt about their scale ratings, Independent Schematics rated themselves as feeling better than did Aschematics ($M_s = 1.82$ vs 2.81 , $p < .09$), while Shy Schematics felt worse than did Aschematics ($M_s = 7.73$ vs 4.23 , $p < .001$). Shy Schematics also felt worse about their shy schema than Independent Schematics felt about their independent schema ($t(34) = 6.89$, $p < .0001$). These ratings confirm the assumption that shyness is negatively evaluated, while independence is positively evaluated.

Despite differences in feelings about particular self-schemas, subjects did not differ from each other in overall level of self-esteem (all between-group tests nonsignificant).

Task One: Judging Adjectives for Self-Descriptiveness

Results on the self-description task were generally the same for both the positive and the negative self-schemas. First, schematics rated a greater proportion of schema-

congruent words as self-descriptive (me) than did Aschematics ($t(31) = 5.05, p < .0001$ for shyness, $t(29) = 1.36, p = .18$ for independence) (see Figures 1 and 2). Second, schematics made these me judgments for schema-consistent adjectives more quickly than did Aschematics ($t(30) = -5.41, p < .0001$ for shyness; $t(29) = -2.46, p < .02$ for independence) (see Figures 3 and 4). Third, Schematics also responded more quickly than Aschematics when they answered not me to schema-incongruent words ($t(31) = -3.10, p < .001$ for shyness; difference nonsignificant for independence). Finally, Schematic subjects were more confident than Aschematics when they endorsed schema-congruent words (for shyness, $M_s = 4.24$ vs $3.73, t(30) = 2.01, p < .05$; for independence, $M_s = 4.60$ vs $4.25, t(29) = 1.61, p < .12$). Together, these results indicate that negatively evaluated self-schemas do exist and operate as do positively evaluated self-schemas.

However, some differences did appear between the two schemas. In comparison with Independent Schematics, Shy Schematics gave fewer me responses ($M_s = 2.76$ vs $5.13, t(31) = -2.92, p < .01$), and more not me responses ($M_s = 6.52$ vs $4.47, t(31) = 3.82, p < .001$) for schema-incongruent (outgoing) adjectives. Thus, Shy Schematics seem particularly well-defined on what they are not.

Task Two: Predicting the Likelihood of Behavior

When asked to predict the probability that they would enact certain behaviors, Schematics predicted that they were more likely to behave in a schema-consistent fashion than did Aschematics. That is, Independent Schematics predicted they would be more likely to enact independent, and less likely to enact dependent, behaviors ($t(31) = 1.79, p < .08$); while Shy Schematics anticipated that they would be more likely to act shy and less likely to act outgoing ($t(33) = 2.12, p < .04$).

Thus, converging evidence from these tasks indicates that negative self-schemas exist and operate essentially as do positive self-schemas.

Study Two

In this study, subjects received false feedback indicating that other students saw them differently than they perceived themselves, in the domain of the self-schema. Subjects then rated the accuracy of this feedback. Accuracy ratings should indicate the extent to which schematics accept or reject such counterschematic information: do people with negatively evaluated self-schemas accept the (more socially desirable) false feedback, allowing themselves to be temporarily persuaded that they are not as "bad" as they believe; or do they know themselves well enough to resist counterschematic information, despite its more positive implications?

Procedure

Three to six subjects participated in each session. The experimenter guided groups in a problem-solving discussion using items from the Choice Dilemma Questionnaire (Kogan & Wallach, 1964). After ten to fifteen minutes of discussion, resolutions to the problems were reached, by consensus or by vote. Subjects were then asked to rate each of the other group members on a series of scales, including the two dimensions independent-dependent and shy-not shy. They also completed a questionnaire rating the group process as a whole. After completing the rating scales, subjects were told that group problem-solving success depended greatly on individual skills and were given a set of reasoning problems to complete. These filler problems gave the experimenter an excuse to leave the room for 15 minutes, during which she "tabulated the impression ratings." When the experimenter returned, she gave each subject a computer printout which supposedly listed the groups' average rating of the individual on each dimension. Most ratings were merely the subject's own previous self-rating from the questionnaire in study 1. However, approximately half of the subjects received a rating which significantly differed (by about 5 points on an 11-point scale) from their own rating. Shy Schematics and Aschematics received incongruent information about shyness; Independent Schematics and Aschematics received incongruent information about

independence. Subjects were asked to judge the accuracy of each rating, and were then debriefed.

Results and Discussion

Percentages of subjects accepting and rejecting feedback consistent or inconsistent with their own previous self-rating are displayed in Table 1. Schematic subjects--whether Independent or Shy--accepted schema-consistent ratings and rejected schema-inconsistent ratings ($p < .002$ for Independent, $p < .003$ for Shy, using the Fisher Exact Test). Aschematics, in contrast, were more variable in their response. Shy Schematics were somewhat less resistant to the counterschematic feedback than were Independents, but this difference failed to reach significance.

Thus, for both types of schemas, counterschematic feedback was rejected, indicating that both positive and negative self-schemas are firmly held and resistant to temporary situational influences.

Conclusion

Together these two studies suggest that when individuals have well-formulated thoughts and feelings about themselves in negatively valued domains, they may be particularly sensitive to negative information and will process it quite efficiently. Although it was reasonable to assume that many individuals would have some difficulty in processing negative self-relevant information because it

would conflict with the general tendency to see one's self positively, there was no evidence in these studies that this conflict interfered with the information processing among schematics. The results from the counter-schematic feedback task suggest that Schematics will seek to support or confirm a prevailing view of self even if it is negative. The research which indicates that individuals ignore or seriously distort negative information may well have studied those who did not have distinct, clearly formed notions about their negative characteristics. In short, well-defined negative beliefs about the self appear to have schematic properties.

An intriguing finding that will require elaboration in further studies is that those with negative self-schemas were particularly well-defined with respect to what they were not. In this study, this meant that the Shy Schematics were very confident that they were not outgoing, not lively, not bold. It may be that a negative self-schema is organized not around its characteristic behavioral features but instead in terms of what the individual desires to do and has not been able to do. Thus the depressed schematics are painfully cognizant of the fact that they are not happy, the overweight schematics that they are not thin, and the shy schematics that they are not outgoing.

References

- Kogan, N., & Wallach, M.A. Risk-taking: A study in cognition and personality. New York: Holt, Rinehart, & Winston, 1964.
- Kuiper, N.A., & Derry, P.A. The self as a cognitive prototype: An application to person perception and depression. In N. Cantor & J.F. Kihlstrom (Eds.), Personality, cognition, and social interaction. Hillsdale, N.J.: Erlbaum, 1981.
- Markus, H. Self-schemata and processing information about the self. Journal of Personality and Social Psychology, 1977, 35, 63-78.
- Markus, H., Crane, M., Bernstein, S., & Siladi, M. Self-schemas and gender. Journal of Personality and Social Psychology, 1982, 42, 38-50.
- Markus, H., Hamill, R., & Sentis, K. P. Thinking fat: Self-schemas for body weight and the processing of weight relevant information. Manuscript under review, 1982.
- Markus, H. , & Sentis, K. The self in social information processing. In J. Suls (Ed.), Psychological perspectives on the self (Vol. 1). Hillsdale, N.J.: Erlbaum, 1982.
- Rogers, T.B. A model of the self as an aspect of the human information processing system. In N. Cantor & J.F. Kihlstrom (Eds.), Personality, cognition, and social interaction. Hillsdale, N.J.: Erlbaum, 1981.

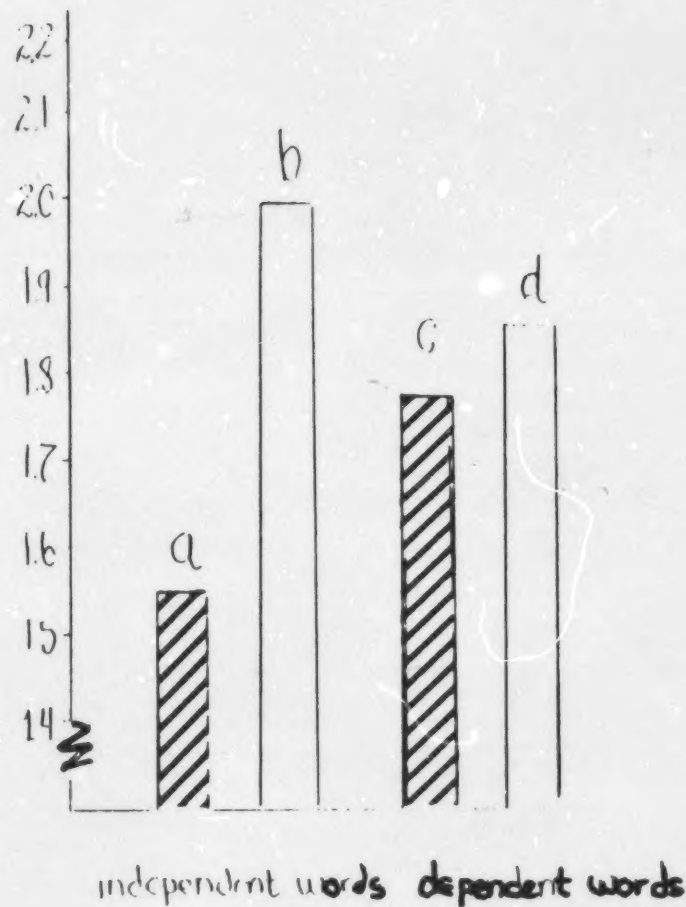
Table 1

Percentages of Subjects Accepting and Rejecting Counterschematic Feedback

Shy Schematics (N=20)	Consistent	Inconsistent
Accept	100%	37.5%
Reject	0%	62.5%
Independent Schematics (N=15)	Consistent	Inconsistent
Accept	100%	0%
Reject	0%	100%
Aschematics (N=27)	Consistent	Inconsistent
Accept	85%	71%
Reject	15%	29%

Figure a

Mean Response Latency (Sec)



▨ Schematics
□ Aschematics

Between Group Comparisons

$a < b, p = .02$

Within Group Comparisons

$a < c, p < .05$

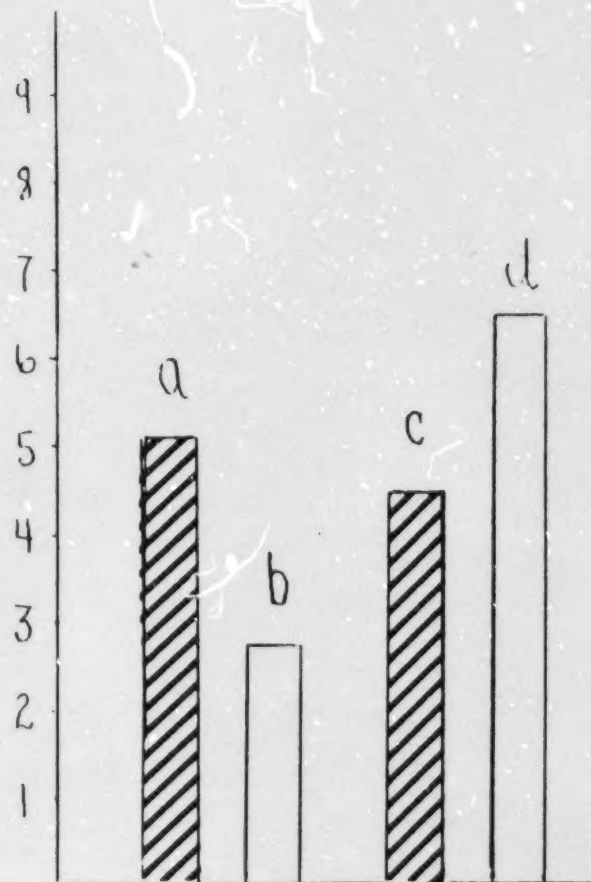
independent words dependent words

"Me" Responses

Independence

Figure b

Number of Words Judged "Me"
(Out of 10)



▨ Independent Schematics
□ Shy Schematics

Between Group Comparisons

$b < a, p = .006$

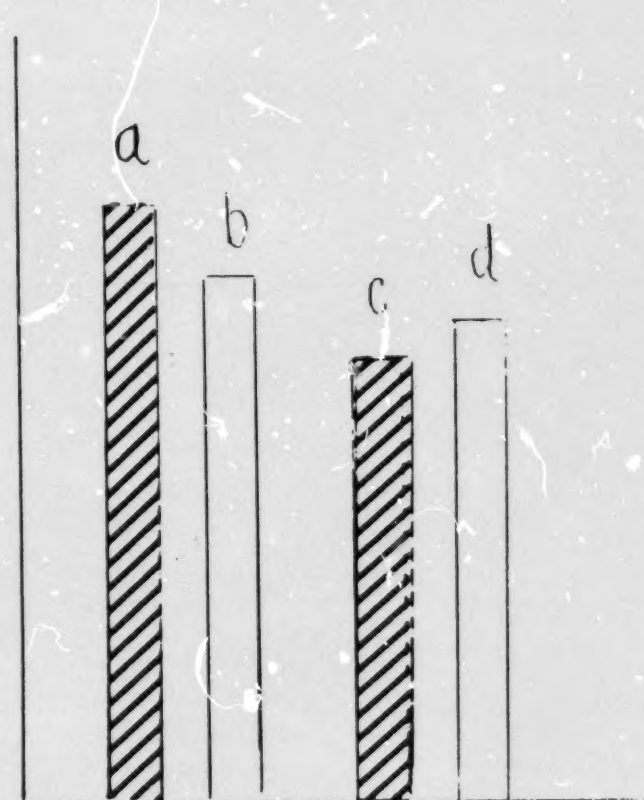
$d > c, p = .0006$

Schema-Inconsistent "Me" Schema-Inconsistent "Not Me"

Schema-Inconsistent Adjectives

Figure 1

Number of Words Judged "Me"
(Out of 10)



▨ Schematics
□ Aschematics

Within Group Comparisons

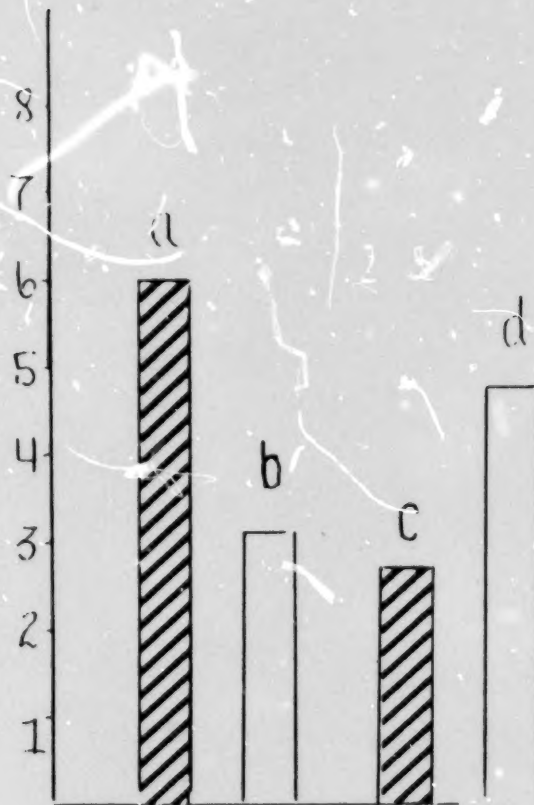
$a > c, p < .05$

independent words dependent words

Independence

Figure 2

Number of Words Judged "Me"
(Out of 10)



■ Schematics
□ Aschematics

Between Group Comparisons

$a > b, p < .0001$

$d > c, p < .001$

Within Group Comparisons

$a > c, p < .005$

$b < d, p < .05$

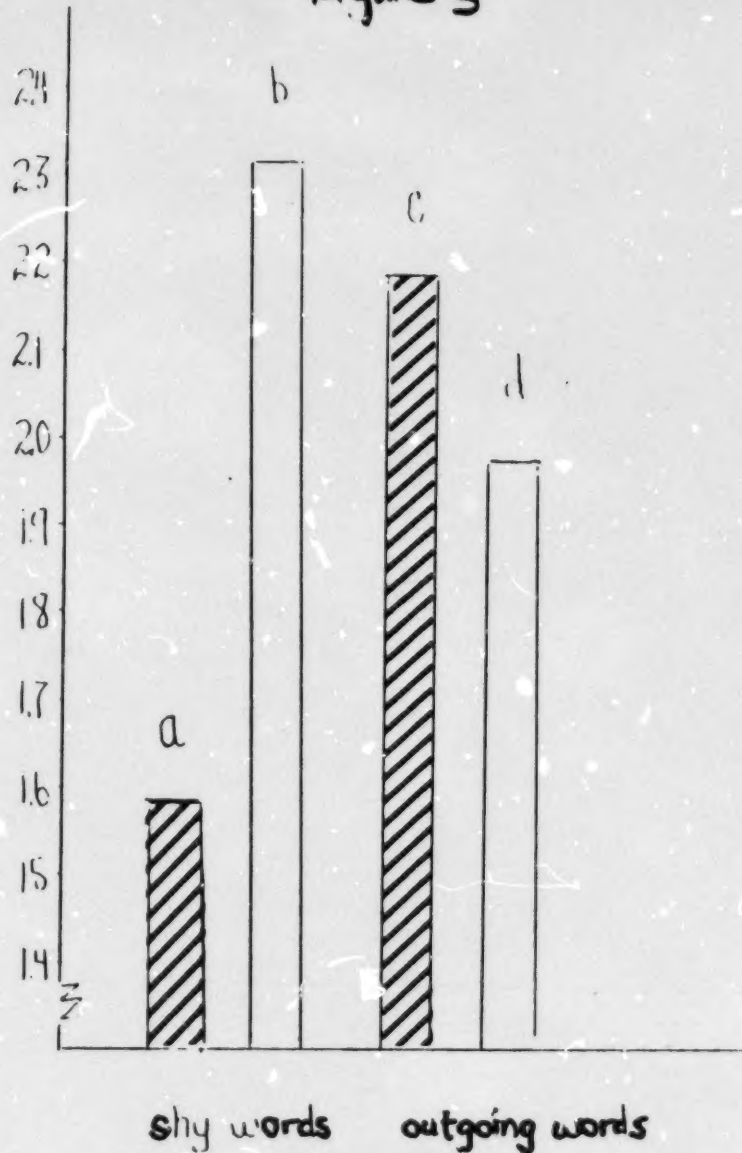
shy words

outgoing words

Shyness

Figure 3

Mean Response Latency (Sec)



 Schematics
 Aschematics

Between Group Comparisons

$a < b, p < 0.001$

Within Group Comparisons

$a < c, p < .005$

$b > d, p < .01$

25

26

"Me" Responses

Shyness